

This genus is named for E. C. Dahms, Curator of Entomology, Queensland Museum. The type species is described as follows:

**Dahmsia australiensis**, new species

Female.—Antenna, Fig. 4, with massive elongate club equal to combined lengths of scape and radicle. Funicle segment 1 twice length of any other segment; segments 1 and 2 distinctly more slender than following segments; funicle segments 3 to 6 short and wide, each with linear sensoria; these obliquely oriented on segments 3 to 5. Antennal setae very short. Pedicel slightly longer than funicle segment 1. Scape and radicle elongate, scape with reticulate sculpturing on dorsal surface.

Fronto-vertex produced well forward of ocelli; upper face including toruli a shelf-like anterior projection of fronto-vertex. From toruli the face abruptly angles ventrally, then slants posteriorly to clypeus. Compound eyes bordered dorsally and anteriorly by large, prominent spines. Fronto-vertex reticulate. Mandibles elongate. Hind wings broadened apically.

Male.—Unknown.

*Holotype female*. MINYON FALLS, N. S. W., AUSTRALIA, by sweeping native vegetation, September 9, 1965, R. L. Doutt. Six paratypes, same data.

Holotype to be deposited at Queensland Museum. Paratypes to be distributed to California Academy of Sciences, U.S.N.M., and Division of Biological Control, University of California, Berkeley.

LITERATURE CITED

- YOSHIMOTO, K. M., M. A. KOZLOV, and V. A. TRJAPITZIN. 1972. A new subfamily of Mymaridae (Hymenoptera, Chalcidoidea). *Rev. Entomol. U.S.S.R.*, 51(4): 878-885. (In Russian).

SCIENTIFIC NOTE

**Cage for observing and rearing small arthropods.**—In studying the biology of the anystid mite, *Anystis agilis* (Banks) a need arose for a positive restraining cage to contain this hyperactive species. Existing cage designs which utilize both barrier and totally enclosed systems were examined (McMurtry and Scriven 1965, *J. Econ. Entomol.*, 58: 282-4; Hughes *et al.* 1966, *J. Econ. Entomol.*, 59: 1024-5; Horsburgh and Asquith 1968, *J. Econ. Entomol.*, 61: 572-3; Medved and Fleschner 1971, *J. Econ. Entomol.*, 64: 342; Osborn and Laing 1972, *J. Econ. Entomol.*, 65: 1175-6) but all proved unsatisfactory due to one or more of the following reasons: escape; cage complexity or expense; poor observability or access; mortalities associated with desiccation, condensation or barriers. To circumvent these disadvantages, a cage was developed that is constructed of readily available and inexpensive prefabricated components (Fig. 1). The design encompasses a confinement area and a water reservoir, and appears well suited for observing and rearing predatory mites and small insects. Its practicality is enhanced by a reusable main body and easily replaceable, expendable components.

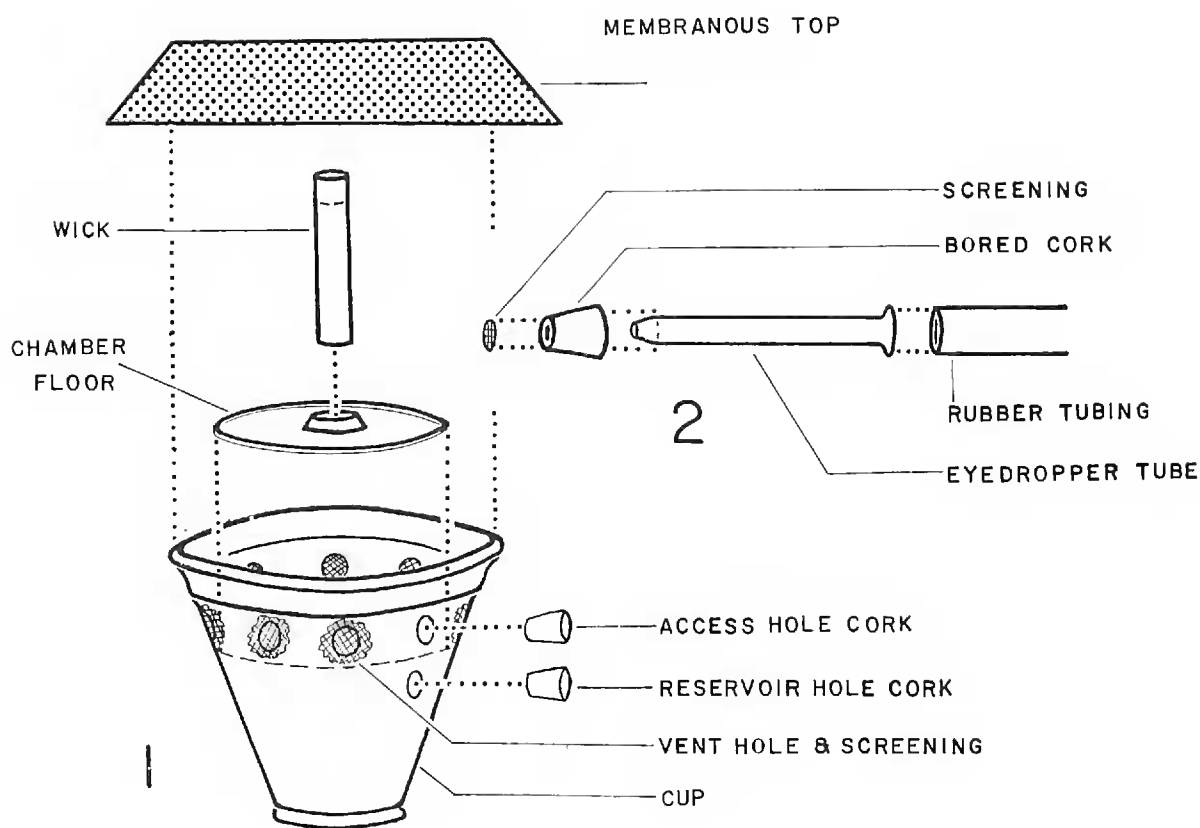


FIG. 1. Cage, exploded view.

FIG. 2. Aspirator, exploded view.

The materials were: plastic food wrap (Stretch & Seal®, Colgate-Palmolive Co., New York, N. Y. 10022); plastic disposable coffee cup refills (Solo Cozy Cup®, 7 oz, No. 806 RC; Solo Cup Corp., Chicago, Ill. 60649); 7 cm dia. plastic cup lids (Dixic® No. 907 S; American Can Co., Easton, Pa. 18042); plastic glue (Weldit Cement®, Weldit Corp., New York, N. Y. 10011); Silicone Seal® (General Electric, Silicone Dept., Waterford, N. Y. 12188); rubber cement; fine weave nylon cloth; dental wicks; and 0.25 in corks.

In construction, 8 holes were punched with a standard paper punch 1.25 cm below the rim of the cup. One of these served as a corked access, with the remaining 7 as screened vent holes. A 9th hole was punched 3.5 cm below the cup rim and served as a reservoir fill hole. The cup lid served as the floor of the confinement chamber, and was trimmed of its central, circular straw hole cover to create a perfectly round opening without nicks. Silicone Seal was applied to the outer edge of the lid, which was inverted and placed into the cup to a depth of ca. 2 cm, thus creating the confinement chamber's vertical depth. This depth placed the lid below the upper 8 vent holes but above the reservoir hole. Nylon cloth, fastened to the cup with plastic glue, was used to cover the vent holes. A 6 cm long dental wick, used as a capillary moisture source, was inserted through the lid's straw hole leaving ca. 1 cm protruding up into the confinement chamber. When wetted, the wick swelled slightly forming a tight seal against the lid. A light, even coat of rubber cement was applied to the cup rim which was then covered with plastic food wrap to form a tight, yet removable and resealable, top.

Cage durability was attested to by survival through several uses and subsequent washings. Expendable components (the wick, the plastic food wrap top and the rubber cement) were replaced when fouled. Damage to the cage's reservoir seal

was quickly repaired by removal of the confinement chamber floor and reapplication of Silicone Seal. Cost per cage was ca. 5 cents (excluding labor), while construction time for each unit was ca. 7 minutes.

A convenient method of introducing specimens through the access hole was achieved by an aspirator modified from a design by Laing and Osborn (1974, *Entomophaga*, 19: 267-77). The aspirator consisted of a rubber tube, an eyedropper glass tube, a small cork with a center hole, and a small piece of 200 mesh per inch screen (Fig. 2). The animal was sucked up lightly and held against the screening, then expelled into the chamber after the modified cork was maneuvered through the access hole.

If the cage is to be used for rearing only, one modification is the substitution of a snap-on plastic top (Dixie® half pint container top No. 2568) for the plastic food wrap top and rubber cement seal. When inverted, this top snaps over the cups' rim. Disadvantages of this modification are: it does not guarantee an absolutely positive seal thereby limiting its use with very small predators; the container top has a poor optical clarity; access is somewhat hampered because of the tight fit of the top.

The only possible disadvantage noted in the cage, as originally described, was a relatively high internal humidity. If undesirable, this might be alleviated by: shortening the evaporative area of the wick, subjecting the cage to external air movement or increasing the number of vent holes. It should also be mentioned that various plastics have been noted to cause some degree of toxicity or behavioral modification with certain insects (Chada 1962, *J. Econ. Entomol.*, 55: 970-2; Hutt and White 1972, *J. Econ. Entomol.*, 63: 615; Osgood 1974, *Can. Entomol.*, 106: 1039-42).

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